

## Fencepost Problems

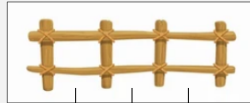
```

Let sum = 0
Let count = 0
Read an integer
while the integer is not zero:
    Add the integer to the sum
    Count it
    Read an integer
Divide sum by count to get the average
Print out the average
    
```

- there's always one more integer read than added/counted

```

read an integer
if integer is 0 → loop is done
add the integer to the sum
count it
read an integer
if integer is 0 → loop is done
add the integer to the sum
count it
read an integer
if integer is 0 → loop is done
add the integer to the sum
count it
read an integer
if integer is 0 → loop is done
...
    
```



read integer	read integer	read integer	read integer
	add and	add and	add and
	count	count	count

## Fencepost Problems

```

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add the integer to the sum
count it
...
    
```

```

for ( int number = scanner.nextInt() ;
      number != 0 ;
      number = scanner.nextInt() ) {
    sum = sum+number;
    count++;
}
    
```

```

for ( ; true ; ) {
    int number = scanner.nextInt();
    if ( number == 0 ) { break; }
    sum = sum+number;
    count++;
}
    
```